

between the eyes and the cephalothoracic glands on each side, and probably has an excretory function. In the two species examined this organ exhibited considerable differences in structure. The organs are purely embryonic; in the youngest specimens of harvest-men which I was able to examine I no longer found any trace of them. I failed to elucidate their fate during the transition to post-embryonic life. This pair of glands reminded me forcibly of the dorsal organ of the Mysidæ, as recently described by Nussbaum* and Butschinski†. Although I did not succeed in observing its first appearance, I nevertheless consider it to be very probable that it appears, precisely like that of *Mysis* (at least in the case of the second species of *Phalangium*), in the form of an invagination of the ectoderm. Similar organs have been observed by Watase‡ in *Limulus*, where they were also found to resemble the dorsal organs of *Mysis*. Kingsley and Patten, however, consider these organs in *Limulus* to be of a sensory character§. As regards *Phalangium* the glandular character of "the lateral or dorsal organs" cannot be open to the slightest doubt, as is proved by the numerous concretions enclosed in their cells and their excretion to the exterior.

LXI.—Description of a Third Species of the Genus
Nyctophilus. By OLDFIELD THOMAS.

THE genus *Nyctophilus* was in Dr. Dobson's 'Catalogue of Bats' || considered to consist in 1878 of only a single species, the Australian Long-eared Bat, *Nyctophilus timorensis*, a species with very much the facies, and evidently taking the place in Australia, of the European Long-eared Bat, *Plecotus auritus*. In 1888 ¶ I had the pleasure of describing a second species of the genus from New Guinea, *N. microtis*, which

* Nussbaum, "Zur Embryologie von *Mysis chamaeleo*," Zeitschr. Naturf. Gesellschaft in Odessa, xii. Bd., 1887.

† Butschinski, "Zur Entwicklungsgeschichte der Mysiden," Zeitschr. Naturf. Gesellschaft in Odessa, xv. Bd., 1890.

‡ Watase, "On the Structure and Development of the Eyes of *Limulus*," Johns Hopkins Univ. Circ. vol. viii.

§ Kingsley, "The Ontogeny of *Limulus*," Zool. Anz. 1890; Patten, "On the Origin of Vertebrates from Arachnids," Quart. Journ. Micr. Sci. xxxii., 1890.

|| P. 172.

¶ Ann. & Mag. Nat. Hist. (6) ii. p. 226.

had so much shorter ears than *N. timorensis* as to have no general resemblance to *Plecotus*; and I now have to describe a third species with ears smaller still, so small, in fact, as to be not longer than those of average species of *Vesperugo*. In other respects the new species is absolutely a *Nyctophilus* and shows no approach to other Vespertilionine genera; so that the long ears of *N. timorensis* may be presumed to be a later development within the genus, and, judging by the abundance and wide distribution of the species, a most successful one.

The type specimen of the new species was obtained by Mr. J. J. Walker, of H.M.S. 'Penguin,' to whose exertions the National Museum is indebted for very large collections in various branches of natural history, and in whose honour I propose to name it

Nyctophilus Walkeri, sp. n.

Allied to *N. microtis*, Thos., but considerably smaller and with smaller ears; these, when laid forwards, do not quite reach to the nose-leaf; they are, however, connected across the forehead by a band about 2 millim. in depth, and in this respect resemble those of *N. timorensis*; besides being shorter they are decidedly narrower than those of *N. microtis*, and their inner margin is much less convex; the small lobe on the inner surface of the base of the outer margin is, as in *N. microtis*, short and well defined, instead of being long and passing gradually at each end into the main outer margin, as is the case in *N. timorensis*.

Other characters apparently as in *N. microtis*, except that the teeth are smaller and weaker in proportion, and the fur is shorter and paler in colour, especially on the under surface, where the hairs are tipped with dirty white.

Dimensions of the type (an adult female in alcohol):—

Head and body 45 millim.; tail 36; ear, length above crown 10·5, breadth 9·5; tragus, length of internal margin 4·3; forearm 33·5; lower leg 15; hind foot 5·5; calcar 12. Tip to tip of upper canines 3·4.

Hab. Adelaide River, Northern Territory, Australia.